

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated April 18, 2005. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

As outlined above, claims 1-15 are pending in this application, wherein claims 1-3, 7, 11, 13 and 14 are being amended to more particularly point out and distinctly claim the subject invention.

Additional Amendments

The specification, drawings and abstract are being amended to correct formal errors and to better disclose and describe the features of the present invention as claimed. Support for the amendments outlined above may be found throughout the specification. Applicant hereby submits that no new matter is being introduced into the application through the submission of this response.

Formal Objections or Rejections

The Examiner objected to the specification, drawings, abstract and claims for various formal errors, and required correction thereof. As outlined above, the specification, drawings, abstract and claims are all being amended in accordance with the Examiner's requirements.

Prior Art Rejections

The Examiner rejected claims 1-5, 7, 10, 13-15 under 35 USC § 102(e) as being anticipated over Kuroda et al. (US Patent No. 6,775,099). Applicants have reviewed this rejection, and hereby respectfully traverse.

The present invention as now recited in claim 1 is directed to a magnetic head comprising a perpendicular recording head, wherein the perpendicular recording head comprises a main pole having an air-bearing surface, and a first yoke connected to the main pole a volume of the first yoke is larger than a volume of the main pole; and the main pole

has four sides including a trailing side, a leading side, a first side substantially parallel to the tracking direction, and a second side substantially parallel to the tracking direction, the leading side, the first side and the second side have faces tapering to the air-bearing surface of the main pole.

The present invention as recited in claim 13 is directed to a magnetic disk drive comprising: at least a magnetic perpendicular recording medium having a soft magnetic backing layer and a recording layer on a substrate, and a perpendicular recording head that incorporates a structure as recited in claim 1.

The present invention as recited in claim 14 is directed to a method of manufacturing a magnetic head having a perpendicular recording head that incorporates the structure recited in claim 1.

In contrast to the present invention, the prior art reference of Kuroda '099 discloses that the first and the second sides have faces tapering from the air-bearing surface of the main pole to the opposite side of the air-bearing surface of the main pole (See Fig. 17 (1)). Kuroda '099 does not disclose that the main pole has the first and the second sides that are parallel to the tracking direction and have faces tapering to the air-bearing surface of the main pole to provide the high magnetic field strength. As such, this reference cannot anticipate or render obvious each and every feature of the present invention as claimed. Rather, the present invention is distinguishable and thereby allowable over Kuroda '099.

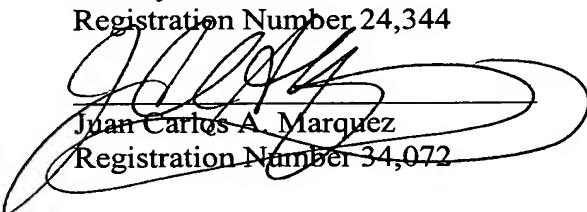
Conclusion

In view of all the above, Applicant respectfully submits that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and phone number indicated below.

Respectfully submitted,

Stanley P. Fisher
Registration Number 24,344



Juan Carlos A. Marquez
Registration Number 34,072

REED SMITH LLP
3110 Fairview Park Drive
Suite 1400
Falls Church, Virginia 22042
(703) 641-4200

September 19, 2005

IN THE DRAWINGS

Please approve the changes to the drawings as outlined in the attached Letter to the Draftsperson, and as shown in the accompanying revised replacement drawings. Specifically, Figures 1A, 1B and 2 are being labeled "PRIOR ART." Also, in Figure 5, the caption "TAPER ANGLE ON THE TRAILING SIDE θ [deg]" is being amended to --TAPER ANGLE ON THE LEADING SIDE θ [deg]--.

IN THE SPECIFICATION

Please amend the appropriate paragraphs of specification in accordance with proposed changes as outlined hereinbelow:

Please amend page 6, last paragraph under the heading BRIEF DESCRIPTION OF THE DRAWINGS, as follows:

~~FIG. illustrates~~ FIGS. 1A and 1B illustrate a conventional magnetic head for perpendicular recording, which is provided with a taper part on the leading side of the head;

Please replace the Abstract of the Disclosure currently on file with the substitute Abstract attached hereto.